





Doc/SER

25X1

Secret



DIRECTORATE OF INTELLIGENCE

# Intelligence Memorandum

Impact on Cambodia of the Closure of the Mekong to International Shipping

Secret

ER IM 68-136 October 1968

Copy No. 82

# WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the US Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

GROUP 1 Excluded from automatic downgrading and declassification

#### Foreword

The Government of South Vietnam temporarily closed the Mekong River to shipping to and from Phnom Penh in late 1967 and again in early 1968. This memorandum describes the effects of the earlier closures and assesses the probable impact on Cambodia of another closure of the Mekong to international shipping.

25X1

CENTRAL INTELLIGENCE AGENCY Directorate of Intelligence October 1968

INTELLIGENCE MEMORANDUM

Impact on Cambodia of the Closure of the Mekong to International Shipping

#### Summary

The closing of the Mekong River to shipping to and from Phnom Penh would have little significant effect on the Cambodian economy. Experience during the longest closing to date -- in February and March 1968 -- demonstrated that the new and growing port of Sihanoukville on the Gulf of Siam could handle most, if not all, of the dry cargo and petroleum cargoes normally handled at Phnom Penh. would, however, be some strains on port facilities and overland transport facilities carrying cargoes to and from the port. Cambodia responded in a low key to the recent closings of the Mekong. A prolonged closure in the future, however, not justified by obvious military hazards to South Vietnam, would certainly evoke vigorous protests to Saigon, and probably to Washington as well.

Berthing capacity at Sihanoukville was doubled by the opening of new dry cargo wharves in April, and the port now can handle all of Cambodia's dry cargo trade with capacity to spare. At the same time, an expansion of petroleum handling facilities is under way that will soon eliminate the need to import petroleum through Phnom Penh. Petroleum storage facilities are now or soon will be available at Sihanoukville, and the new rail line into Sihanoukville, scheduled for completion in April 1969, will be able to carry all of the port's cargo.

Recent closings of the Mekong to international shipping by the South Vietnamese Government -- for 20 days in October-November 1967 and 50 days in February-March 1968 -- resulted in some shipping

Note: This memorandum was produced solely by CIA. It was prepared by the Office of Economic Research and was coordinated with the Office of Current Intelligence.

Approved For Release 2009/10/06: CIA-RDP85T00875R001600010086-6

# **SECRET**

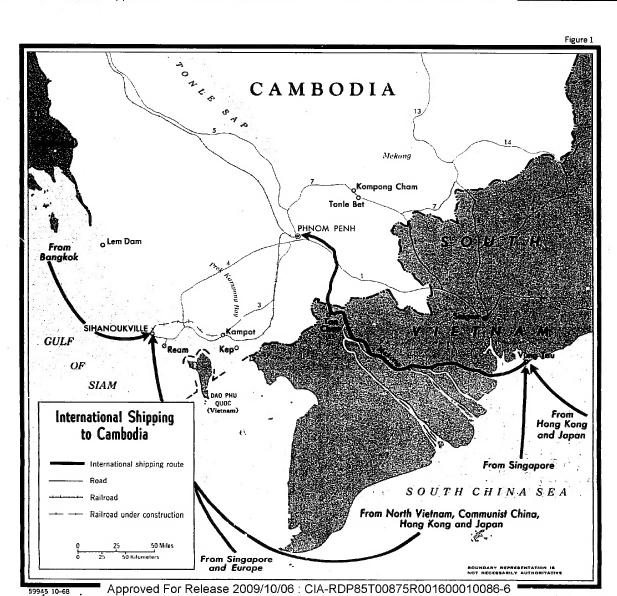
delays at Sihanoukville and local, temporary shortages of petroleum. These shortages were largely a result of an inadequate number of drums and tank trucks to handle the increased demands on road transport. There apparently were no problems in diverting other imports to Sihanoukville.

The rate of discharge of petroleum products at Sihanoukville during the period when the Mekong was closed in February and March was nearly equal to the rate at Phnom Penh during the months when the capital's port was open in 1968. The lack of petroleum storage facilities at Sihanoukville was circumvented -- through the assistance of the international oil companies -- by (1) stationing a small tanker in the harbor to provide temporary floating storage for bulk petroleum until tank trucks and drums became available ashore, (2) off-loading petroleum directly into tank trucks and small, collapsible storage tanks, and (3) delivering petroleum in drums for transshipment inland by trucks -a normal practice. Small, additional quantities of petroleum also may have been delivered by lighters to Kampot, a small port on the Gulf of Siam which is connected by rail to Phnom Penh.

The oil companies almost certainly would provide Cambodia with additional help in the event of future closings. Moreover, petroleum apparently already is being stockpiled in Cambodia to mitigate the effects of any future closings, and imports of equipment needed for storage and internal distribution probably also have been stepped up.

# Controls on Mekong Traffic

- Under the terms of a tripartite agreement signed by Cambodia, Vietnam, and Laos in 1954, ships flying the flags of the contracting countries or of the countries that recognize these three countries diplomatically are allowed freedom of navigation on the Mekong. Until October 1964, controls over international shipping proceeding through South Vietnam up the Mekong to Cambodia were minimal. Vietnamese pilot and customs official accompanied each ship but there was no inspection of cargoes or cargo spaces. Regulations, issued by the Government of South Vietnam in October 1964 and January 1965, specify that (1) Communist-flag ships and ships and cargoes from Communist ports are prohibited from entering the Mekong, (2) South Vietnamese permission is required for the movement of weapons, ammunition, and commodities of military significance, and (3) inspection of all cargoes is authorized. Communist carriers to Cambodia now use the port of Sihanoukville.
- 2. Additional restrictions were imposed in late 1966 because of the growing concern of South Vietnamese and allied military authorities that supplies were being off-loaded from Free World ships into Viet Cong sampans along the Mekong. Since the middle of November 1966, all Free World ships transiting the Mekong River to Phnom Penh have been required to sail in convoys escorted by South Vietnamese gunboats. Four round-trip convoys a month operate between Vung Tau and Tan Chau near the Cambodian border (see Figure 1). South Vietnam permits a convoy turnaround time of 72 hours in Cambodia.
- 3. Cargo manifests are turned over to Vietnamese authorities at the convoy assembly point in Vung Tau, but cargo and holds normally are not inspected. The primary reasons for the lack of closer inspection apparently are that thorough inspection requires considerable time and personnel and that the South Vietnamese Government would be liable for costs incurred by delays in ship movements. Still the Communists would not be likely to take a chance on lax inspection procedures, especially to ship arms and ammunition aboard Free World carriers. Moreover, illicit off-loading en route appears to be precluded by the presence of a South Vietnamese escort officer



- 4 -SECRET

aboard each ship to the Cambodian border and by the attachment of official seals to the hold areas.

#### Temporary Closings of the Mekong

4. Between 14 October and 2 November 1967, and
again between 5 February and 25 March 1968, South
Vietnam closed the Mekong to international shipping
to Cambodia by halting the convoys from Vung Tau.
The closing in late 1967 ostensibly was for security
reasons. for example
mine sweeping operations on various parts of
the river as the reason. There was speculation at
the time, however, that Saigon was motivated by
political considerations. Vice President Ky, when
he had been prime minister, had publicly threatened
to close the Mekong in retaliation for Cambodia's
recognition of the National Liberation Front in
June 1967. South Vietnam had also been claiming
other unfriendly acts on the part of Cambodia.
The February-March closure, on the other hand,
stemmed from legitimate problems associated with
the Tet offensive, such as the unavailability of
escort vessels because of the South Vietnamese
Navy's preoccupation with priority security tasks.

25X1 25X1

5. The initial 20-day closure of the Mekong in October and November 1967 produced no apparent shortages of imports and little disruption to shipping. Two scheduled convoys up the Mekong were canceled, causing the diversion of at least five ships and 7,000 tens\* of cargo from Phnom Penh to Sihanoukville. Nevertheless, the total volume of imports to Cambodia was the same in October as in September, as shown in Table 1. The decrease in exports from Sihanoukville partly reflects the completion of exports of rice for the year and, to a lesser extent, difficulties in shifting goods from one port to the other within Cambodia on short In November, after the Mekong was reopened, notice. more cargo moved through Phnom Penh than through Sihanoukville. (For additional information on Cambodia's seaborne trade, see the Appendix.)

<sup>\*</sup> Unless otherwise indicated, all tonnages are given in metric tons.

- 6. The effects of the 50-day closure of the Mekong in February and March of this year were considerably more extensive than those of the earlier closure. Ship arrivals at Phnom Penh dropped from 32 in January to none in February and to only five in March, whereas calls at Sihanoukville increased from 23 in January to 37 in February and 52 in March. The increase in traffic at Sihanoukville in February and March led to delays there, and some ships were diverted to ports in other countries where their cargoes were off-loaded for subsequent transshipment. The volume of imports declined slightly in February, then recovered in March, but export shipments apparently were more seriously affected, as shown in Table 2.
- 7. Difficulties were encountered in maintaining petroleum supplies during the February-March 1968 closure of the Mekong, but essential needs were met. International oil companies\* played a leading role in diverting fuel imports to Sihanoukville. They also cooperated with government officials and private truckers in working out the distribution of supplies within the country. The absence of bulk storage facilities at Sihanoukville was partly offset by stationing a small tanker of about 2,000 tons in the harbor as a floating reservoir. Bulk seaborne deliveries were speeded by discharging into the stationary tanker for subsequent transloading ashore as tank trucks became available. Collapsible tanks were acquired to provide additional bulk storage. By drawing tank trucks from the provinces and improvising additional truck-mounted tanks (see Figure 2) a fleet of more than 100 trucks was mustered to deliver petroleum to the distribution center at Phnom Penh and elsewhere.\*\* Some petroleum also arrived at Sihanoukville in drums and was transported inland by cargo

* Shell, Esso, Standard Oil of Coall of Cambodia's	alifornia)	provide at	Texaco and ll or nearly
** Some petroleum through Kampot.	m mau also	have been	îmported

25X1

25X1

Table 1

Cambodia: Imports and Exports at Phnom Penh and Sihanoukville September-October 1967

	·						Thousan	d Metri	c Tons
	Phnom Penh			Sihanoukville			Total		
1967	Im- ports	Ex- ports	Total	Im- ports	Ex- ports	Total	Im- ports	Ex- ports	Total
September	<b>3</b> 0	18	48	7	43	50	37	61	98
October	15	8	23	22	25	47	37	33	70

Table 2

Cambodia: Imports and Exports at Phnom Penh and Sihanoukville
January-March 1968

	<del></del>	<del></del>			<del></del>		Thousar	d Metri	c Tons
	Phnom Penh			Sihanoukville			Total		
1968	Im- ports	Ex- ports	Total	Im- ports	Ex- ports	<u>Total</u>	Im- ports	Ex- ports	Total
January	40	22	62	25	18	43	65	40	105
February	0	0	0	60	13	73	60	13	73
March	6	4	10	71	32	103	77	36	113

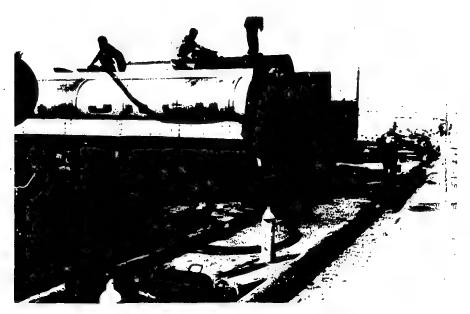


Figure 2. Fuel Trucks Loading Directly from a Tanker at Sihanoukville in March 1968.

Note the tanks mounted on conventional truck bodies.

trucks -- a procedure that occasionally had been used in the past. Bulk petroleum products also had been discharged directly into tank trucks at Sihanoukville in the period December 1966 to March 1967, when petroleum deliveries via the Mekong were delayed by the institution of the convoy system.\*

25X1

\* Fuel shortages that followed the delayed arrivals of tankers at Phnom Penh in November and December 1966 revealed a critical lack of reserve stocks. Petroleum imports were then stepped up. Nearly 7,000 tons of bulk petroleum were delivered to Sihanoukville between December 1966 and March 1967. In the same period, petroleum shipments to Phnom Penh were unusually heavy.

As a result of the improvisations, petroleum imports during the 50 days that the Mekong was closed in February and March 1968 amounted to 37,000 tons (not including somewhat more than 1,000 tons of petroleum delivered to Sihanoukville in March after the reopening of the Mekong). Thus, imports in the 50 days amounted to an average daily discharge of about 740 tons. This volume of imports was close to the average daily volume of 830 tons discharged at Phnom Penh in January and April through June, when the Mekong was open to Cambodian shipping, and is greater than Cambodia's daily requirements for petroleum of about 670 tons. The variations in monthly imports of bulk petroleum at Phnom Penh and Sihanoukville for selected months of 1967 and 1968 are shown in Table 3.

Table 3

Cambodia: Imports of Bulk Petroleum at Phnom Penh and Sihanoukville September-November 1967 and January-April 1968

		Thousand Metri	c Tons
Period	Phnom Penh	Sihanoukville	Total
1967			
September October <u>a/</u> November <u>a/</u>	16.9 11.6 21.6	0 0 0	16.9 11.6 21.6
January February <u>a</u> / March <u>a</u> / April	27.5 0 4.6 25.7	0 13.2 25.2 11.3	27.5 13.2 29.8 37.0

a. The Mekong was closed to international shipping during the periods of 14 October to 2 November 1967 and 5 February to 25 March 1968.

- 9. Whe quick and successful diversion of petroleum imports from Phnom Penh to Sihanoukville resulted in the avoidance of any more than local and temporary shortages of petroleum. The shortages that did develop were caused by distribution problems rather than by any overall scarcity of petro-During neither closing of the Mekong was rationing instituted, largely because it was not required, but perhaps also because of the difficulties the Cambodians would have had in administering a rationing system. Some black markets did develop, however, in Phnom Penh and other parts of the country. The earlier closure of the Mekong in 1967 was brief, and stockpiles were adequate to prevent any serious shortages of petroleum products even though there was no attempt to divert petroleum imports to Sihanoukville.
- 10. There apparently were no shortages of other imports. Table 4 shows that total imports of dry cargo actually increased during the periods of the Mekong closures.

Table 4

Cambodia: Imports of Dry Cargo
at Phnom Penh and Sihanoukville
September-November 1967 and January-April 1968

		Thousand Metric Tons				
Period	Phnom Penh	Sihanoukville	Total			
1967						
September October <u>a/</u> November <u>a</u> /	13.1 3.8 20.4	6.8 22.0 15.2	19.9 25.8 35.6			
1968						
January February <u>a</u> / March <u>a</u> / April	12.5 0 1.8 7.6	25.5 46.3 46.2 35.5	38.0 46.3 48.0 43.1			

a. The Mekong was closed to international shipping during the periods of 14 October to 2 November 1967 and 5 February to 25 March 1968.

11. The diversion of shipments -- both petroleum and dry cargoes -- to Sihanoukville did put an additional burden on Cambodian transport and resulted in accelerated wear and tear on trucks. By the end of the 50-day closure Cambodiar officials were expressing concern about supplies of tires and spare parts.

#### Impact of Possible Future Closings

- 12. The impact on the Cambodian economy of a future closing of the Mekong would depend to some extent on the timing and duration of such a closure, but would be small in any event. Closure of the Mekong in the immediate future -- before the end of 1968 -- would produce, at most, essentially the same effects that followed the February-March closure. There would be a rapid diversion of incoming shipping to Sihanoukville, with only insignificant delays. A sharp increase in trucking requirements and in additional maintenance and spare parts problems also would occur again. Some local, temporary shortages of petroleum would result, but these probably would be even less significant than during the previous closures of the Mekong.
- 13. Techniques developed by the oil companies, government officials, and Cambodian truckers for handling cargoes diverted through Sihanoukville during the earlier closures would permit a smoother adjustment in the event of another closure. Furthermore, stepped up imports of petroleum in recent months suggest that Cambodia already is stockpiling in anticipation of this possibility. Total imports of petroleum by Cambodia in April-June 1968 --more than 90,000 tons -- far exceeded average imports in recent quarters. Average quarterly imports in 1967 were less than 60,000 tons. addition, Cambodia also is presumably attempting to stockpile petroleum containers, tires, and truck parts. The oil companies undoubtedly would again assist in maintaining petroleum deliveries in the event of future closings, unless the United States and its allies in South Vietnam could successfully apply pressure against such assistance.
- 14. As the earlier closing of the Mekong this year confirmed, there is more than ample capacity in Cambodia's road and/or railroad system to move

the dry cargo that would be diverted to Sihanouk-ville. (For a discussion of port clearance capacity, see the Appendix.) Reasonably good management — a skill admittedly in short supply in Cambodia — would be needed, however, in order to sustain the flow of imports and exports. The allocation of trucks between the distribution of petroleum and other imports and the transport of rice both internally and to Sihanoukville for export during the November-January harvest season would be an especially thorny problem. Temporary truck shortages probably would develop if the Mekong were closed during the rice harvest.

As time goes on, a closure of the Mekong would have less and less of an impact on Cambodia. By early 1969 the last link (Kampot-Sihanoukville) in the railroad line connecting Sihanoukville and Phnom Penh will probably be sufficiently close to completion to be pressed into service quickly. New bulk storage and tanker discharge facilities now under construction probably will be available in Sihanoukville. Some of the new facilities at Sihanoukville will enable tankers to pump crude oil directly to a new refinery that is now under construction there and is que for partial operation some time in 1969.\* The tank farm is in an advanced stage of construction and probably has been given priority in view of the demonstrated need for bulk storage facilities at Sihanoukville (see Figure 3). When completed, the plant should be more than adequate to satisfy Cambodia's foreseeable requirements for petroleum products and will probably eliminate Phnom Penh as a major port for petroleum

The refinery, which is being built by Koppers Company of France, is to have a capacity for converting up to 600,000 tons of crude oil per year. Products will include gasoline, motor oil, jet fuel, kerosene, diesel fuel, bottled gas, asphalt, and various types of fertilizer. Initially the plant will be operated for the Cambodian Government by the French firm, Union General des Petroles, but eventually it will be run by a Cambodian staff trained by the French. Operation of the plant at a maximum capacity is not anticipated until 1975. Presumably, Cambodia will attempt to export production in excess of its domestic needs.



Figure 3. POL Tanks at Sihanoukville Refinery, July 1968

imports. The refinery's products will be distributed to the interior by the new rail line and by road. A pipeline from Sihanoukville to Phnom Penh was under consideration several years ago but work was never begun.

During 1966 and 1967 the average amount of dry cargo handled at Sihanoukville each month was about 45,000 tons, a volume well below the port's peak performance of 102,000 tons achieved in June 1965, when rice exports approached record levels. In March 1968, when the Mekong was closed, Sihanoukville handled 78,000 tons of dry cargo. New wharves with berthing space for four large cargo ships were opened at Sihanoukville in April, thereby doubling the port's dockside berthing facilities. result of the completion of new berths, Sihanoukville probably can handle more than 200,000 tons of dry cargo a month. Sihanoukville has the added advantage of being able to accommodate cargo ships of up to approximately 15,000 deadweight tons, whereas Phnom Penh is limited to vessels of less than 6,000 deadweight tons. It is unlikely that Sihanoukville's new capacity to handle dry cargo will soon be taxed even if all of Cambodia's increasing seaborne trade is channeled through it.

# Political Repercussions

17. Cambodia responded in a low key to the two interruptions of its international shipping and the South Vietnamese requirement that only ships in

convoy could move up the Mekong River to Phnom Penh. A prolonged closure of the river to Cambodia's international commerce, not justified by obvious military hazards such at the Tet offensive in February-April 1968, however, would almost certainly evoke vigorous Cambodian public and diplomatic protests. Such protests probably would include accusations that the United States was participating in the blockade of an international waterway.

#### Appendix

#### Cambodia: Cargoes and Inland Transportation

#### Cambodia's Seaborne Trade, 1964-67

All but a negligible portion of Cambodia's foreign trade normally moves by water through the ports of Sihanoukville on the Gulf of Siam and Phnom Penh on the Mekong River. Relatively equal volumes of cargoes transited Sihanoukville and Phnom Penh in 1964-67, Sihanoukville handling somewhat the larger share of exports, and Phnom Penh a slightly larger quantity of imports (see Table 5). Cambodia's four minor ports on the Gulf of Siam -- Kampot, Kep, Lem Dam, and Ream -- are mainly fishing ports of little commercial importance.

Cambodia's principal imports are petroleum products, cement, metals, and machinery. Imports in 1967 were valued at \$96 million. Petroleum products, which are not refined locally, accounted for about 35 to 40 percent, by weight, of all Cambodian seaborne imports in 1967-68. About 75 percent of petroleum imports have been supplied by the Shell Company, mostly from their own storage terminal in Saigon. Esso Standard Eastern, Inc., and Caltex have provided about 20 percent and 5 percent, respectively, of Cambodia's petroleum requirement.

Cambodia's major export is rice, although corn, rubber, and wood also account for sizable shares of export tonnage. Cambodia is largely dependent upon the foreign exchange earned by exports (about \$83 million in 1967) to finance imports of manufactured goods and petroleum products. Although imports play a small role in the daily lives of most of the population, they are essential to the operation and expansion of Cambodia's limited manufacturing, construction, and transport industries. Approximately half of the petroleum imported is consumed by trucks and autos; another

	1964	<u> </u>	1965	1965		1966		1967	
	Thousand Metric Tons	Per- cent	Thousand Metric Tons	Per-	Thousand Metric Tons	Per- cent	Thousand Metric Tons	Per-	
Total trade	1,429.9	100.0	1,346.3	100.0	1,070.0	100.0	1,070.4	100,0	SE
Phnom Penh Sihanoukville	715.1 714.8	50.0 50.0	592.1 75 <b>4.</b> 2	44.0 56.0	517.0 553.0	48.3 51.7	535.5 534.9	50.0 50.0	SECRET
Imports	508.9	100.0	543.7	100.0	574.6	100.0	585.1	100.0	7
Phnom Penh Sihanoukville	322.1 186.8	63.3 36.7	279.0 264.7	51.3 48.7	297.5 277.1	51.8 48.2	344.1 241.0	58.8 41.2	
Exports	921.0	100.0	802.6	100.0	495.4	100.0	485.3	100.0	
Phnom Penh Sihanoukville	393.0 528.0	42.7 57.3	313.1 489.5	39.0 61.0	219.5 275.9	44.3 55.7	191.4 293.9	39.4 60.6	

20 to 30 percent by thermal generators, the country's principal source of electric power;\* and the remainder by households and aircraft. Imports also provide more than half of Cambodia's requirements for cement, although domestic production currently is being expanded.

# Principal Cargoes at Phnom Penh and Sihanoukville

In 1964-67, almost all of Cambodia's petroleum imports were shipped up the Mekong to Phnom
Penh, where approximately two-thirds of Cambodia's
30,000 tons of identified bulk petroleum storage
is located. Some additional storage capacity is
provided by an indeterminate but presumably signifiicant number of fuel drums.\*\* Petroleum products
principally gasoline and diesel oil, normally
account for about 70 percent of Phnom Penh's inport tonnage.

Cement and coal are major imports at Sihanouk-ville. All of Cambodia's imports of military equipment also are delivered to Sihanoukville. For detailed data on the tonnages of commodities imported at both Phnom Penh and Sihanoukville in 1965-67, see Table 6. Comparable data on exports are not available, but rice, corn, and rubber probably account for most of the export tonnage at both major maritime ports.

<sup>\*</sup> Cambodia has a minimum of some 65,000 kilowatts in installed generating capacity, composed of petroleum-fired thermal power plants. About 80 percent of both production and consumption is concentrated in the Phnom Penh area, where much of the population, commerce, and industry is concentrated. The larger towns, other than Phnom Penh, without electricity. One hydroelectric power plant, built with foreign aid, is now in operation, and at Approved For Release 2009/10/06: CIA-RDP85T00875R001600010086-6

Approved For Release 2009/10/06: CIA-RDP85T00875R001600010086-6

SECRET

Metric Tons

a. Data have been rounded to the nearest 10 tons. Because of rounding, components may not add to the totals shown.
b. Including a small but unknown volume of cargo in transit for Laos and petroleum deliveries upriver to the Cambodian ports of Kompong

#### Port Clearance

By April 1969, Sihanoukville is scheduled to be linked to Cambodia's rail net with the completion of the 100-kilometer rail line between Kampot and Sihanoukville. At least 95 freight cars have been imported already through Sihanoukville and are presently stored on the limited trackage close to the port area (see Figure 4). Aside from the



Figure 4. Newly Imported Railroad Cars on a Siding at the Port of Sihanoukville, July 1968

rolling stock at Sihanoukville, Cambodia has at least 25 steam locomotives, a few diesel locomotives, some 65 passenger cars, and about 520 freight cars. The line will have an estimated capacity of about 15 trains per day each way, whereas only five to six trains each way per day could maintain Cambodia's entire seaborne trade at the peak 1964 level. (Because of declining exports the average daily volume of Cambodia's seaborne foreign trade decreased from 3,900 tons in 1964 to 2,900 tons in 1966 and 1967.) The railroad probably will carry the major share of the port's traffic. It will connect Sihanoukville with Cambodia's commercial center at Phnom Penh as well as with one of the nation's most productive agricultural areas in the western provinces.

Even without the rail line, the current capacities of trucks and roads are more than adequate to handle all of Cambodia's seaborne trade at Sihanoukville. If the Mekong were closed at a time when the volume of trade approximated the peak 1964 level, possibly 10 percent of the nation's truck inventory (estimated at 8,700 civilian and 2,800 military trucks) might have to transfer from other duties to maintain the flow of goods through

Sihanoukville. The transfer of substantially fewer trucks would be required to handle a diversion of the current volume of trade. Some truck reallocation problems were encountered during this year's 50-day closure of the Mekong, but the difficulties would seem to have been minimal, inasmuch as more than three-quarters of seaborne cargoes already were being carried to and from the ports by truck.